

CLAIMS

What is claimed is:

1. A contact lens having an exterior surface and an opposite interior surface, comprising:
 - a. a bifocal optical zone comprising a soft contact lens material;
 - b. a transition zone, also comprising a soft contact lens material, depending downwardly from the lower edge of the bifocal optical zone; and
 - c. a ridge zone, also comprising a soft contact lens material, depending downwardly from the transition zone and including a latitudinal ridge portion that extends outwardly from the outer surface, the latitudinal ridge portion having a shape that enables engagement with a lower eyelid of a user so as to provide vertical translation support for the contact lens when being worn by the user.
2. A contact lens having top, a bottom, a rotational axis, an inner surface and an opposite outer surface, the outer surface including a plurality of zones, comprising:
 - a. an optical zone having a lower edge, including:
 - i. a distance vision zone having a first radius of curvature that provides distance vision correction and having a first area that is sufficient to overlay a substantial portion of a pupil of a user and disposed in a first position within the optical zone so that the user's pupil is substantially subtended by the distance vision zone when the user is gazing at a substantially horizontal point; and
 - ii. a near vision zone, extending radially outward from the distance vision zone, having a second radius of curvature that

provides near vision correction and having a second area that is sufficient to overlay a substantial portion of a pupil of a user and disposed in a second position within the optical zone so that the user's pupil is substantially subtended by the near vision zone when the user is gazing at a near vision point below the substantially horizontal point;

- b. a ridge zone, having an upper edge and a lower edge and disposed below the optical zone, that includes a latitudinal ridge portion extending outwardly from the outer surface to enable engagement with a lower eyelid of a user and thereby provide vertical translation support for the contact lens when being worn by the user;
- c. a transition zone extending from the lower edge of the optical zone to the upper edge of the ridge zone that provides a smooth transition from the ridge zone to the optical zone; and
- d. a bevel zone, extending radially outward from the ridge-off zone and the lower edge of the ridge zone, that tapers to a narrow end.

3. The contact lens of Claim 2, wherein the distance vision zone has a center that is offset from the rotational axis of the contact lens.

4. The contact lens of Claim 2, wherein the distance vision zone has an oval shape.

5. The contact lens of Claim 2, wherein the optical zone includes a top edge and the ridge zone comprises a first side edge and a second side edge, the contact lens further comprising a ridge-off zone extending outwardly from the top edge of the optical zone, first side edge of the ridge zone and the second side edge of the ridge zone, the ridge-off zone having sufficient area so that the ridge-off zone, the optical zone, the ridge zone and the transition zone cover substantially all of a user's cornea.

6. The contact lens of Claim 2, comprising a soft contact lens material.
7. The contact lens of Claim 6, wherein the soft contact lens material comprises a silicon hydro-gel.
8. The contact lens of Claim 6, wherein the soft contact lens material comprises HEMA.
9. A method of producing a master cast used in making a contact lens mold, comprising the steps of:
 - a. rotating a blank, having an outer surface, about a first rotational axis and cutting at least one first surface onto the outer surface of the blank; and
 - b. rotating the blank about a plurality of secondary rotational axes, each secondary rotational axis being different from the first rotational axis, and cutting a portion of a ridge-off surface from the outer surface of the blank while rotating at each secondary rotational axis, thereby forming a ridge-off surface once the blank has been rotated about each of the plurality of secondary rotational axes.
10. The method of Claim 9, wherein the blank is affixed to a spindle and wherein the step of rotating the blank about a plurality of secondary rotational axes comprises the step of applying a spacer to the spindle in a plurality of orientations, wherein when the spacer is applied to the spindle in each of the plurality of orientations, the blank will rotate about a different secondary rotational axis of the plurality of secondary rotational axes.
11. The method of Claim 9, wherein at least a portion of the first surface comprises a distance vision surface.

12. The method of Claim 9, wherein at least a portion of the first surface comprises a near vision surface.
13. The method of Claim 9, wherein at least a portion of the first surface comprises a ridge surface.
5
14. The method of Claim 9, wherein at least a portion of the first surface comprises a bevel surface.